

WHAT IS CLAIMED IS

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1. A capacitor, comprising:
a capacitor part comprising a dielectric
film sandwiched by a pair of electrodes; and
a support body of a film of an organic
10 polysilane, said support body supporting said
capacitor part thereon.

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2. The capacitor as claimed in claim 1,
further comprising an insulation layer covering said
capacitor part.

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3. A method of manufacturing a capacitor
including a capacitor part in which a dielectric film
25 is sandwiched by a pair of electrodes and a support
body of an organic polysilane film supporting said
capacitor part, comprising the steps of:

forming a layer of organic polysilane on a
surface of a base material;

30 forming a first electrode on said layer of
organic polysilane;

forming a dielectric film on said first
electrode;

forming a second electrode on said dielectric film;

forming an insulation layer on said layer of organic polysilane and on said second electrode;

5 said layer of organic polysilane, said first electrode, said dielectric film, said second electrode and said insulation layer forming a layered body on said base material,

10 forming a groove in said layer of organic silane and said insulation layer for dividing said layered body into individual capacitors; and

removing said base material.

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4. The method as claimed in claim 3, wherein said step of removing said base material is conducted in the state that a tape is attached to a top surface
20 of said insulation layer so as to bridge said groove.

25 5. substrate for mounting a semiconductor chip thereon, comprising:

a substrate body defined by upper and bottom surfaces;

30 a plurality of terminals provided on said top surface for connection with a semiconductor chip mounted on said top surface, said top surface thereby forming a chip-mounting surface;

a plurality of terminals provided on said

bottom surface for external connection, said bottom surface thereby forming a mounting surface; and

a capacitor embedded in said substrate body right underneath said chip-mounting surface,

5 said capacitor comprising:

a capacitor part including a dielectric film sandwiched by a pair of electrodes; and

a support body of an organic polysilane film supporting said capacitor part.

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6. A method of manufacturing a substrate for mounting a semiconductor chip, said substrate having a mounting surface carrying thereon terminals for external connection at a lower principal surface and a chip-mounting surface for carrying a semiconductor chip at an upper principal surface, said substrate further including a capacitor embedded right underneath said chip-mounting surface such that said capacitor includes a capacitor part formed of a dielectric film sandwiched by a pair of electrodes and a support body of an organic polysilane film supporting said capacitor part, said capacitor having an insulation film covering said capacitor part,

25 said method comprising the steps of:
bonding said capacitor on a base;
forming an insulation layer on said base
30 such that said insulation layer covers said capacitor;
laminating a plurality of insulation layers on said base so as to cover said capacitor; and
removing said base.

7. A semiconductor device, comprising:
a substrate; and
a semiconductor chip mounted on said
substrate,
5 said substrate comprising:
a substrate body defined by upper and bottom
surfaces;
a plurality of terminals provided on said
top surface for connection with said semiconductor
10 chip mounted on said top surface, said top surface
thereby forming a chip-mounting surface;
a plurality of terminals provided on said
bottom surface for external connection, said bottom
surface thereby forming a mounting surface; and
15 a capacitor embedded in said substrate body
right underneath said chip-mounting surface,
said capacitor comprising:
a capacitor part including a dielectric film
sandwiched by a pair of electrodes; and
20 a support body of an organic polysilane film
supporting said capacitor part.